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IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF MARYLAND  
NORTHERN DIVISION

WILLIAM LOCKWOOD,

Plaintiff

Civil Action No.

v.

PACIFIC USA, LTD., PACIFIC CYCLE, LLC  
and TOYS "R" US - DELAWARE, INC.

WMN-02-CV-2068

Defendants.

AFFIDAVIT OF NAOJI TANAKA

I, NAOJI TANAKA, the undersigned, do solemnly affirm that:

1. I am over 18 years of age, fully competent to testify as a witness, and have first-hand knowledge of the matters set forth in this affidavit.
2. I currently am employed by SR Suntour, Inc. (SR Suntour) in the position of engineering development, which I have held since 1995.
3. As engineering development I am responsible for production of the various bicycle forks manufactured by SR Suntour.
4. The SR Suntour Duo Track 7006 model fork used in the Pacific Cycle Strike Mountain Bike that is the subject of this litigation was designed and manufactured using a mechanical bond fit to secure the steel steerer tube to the aluminum alloy fork crown.
5. At the relevant time it was, and it still is within the industry standard to design a fork using a mechanical bond fit to secure a steel steerer tube into a aluminum alloy fork crown. This is one of multiple acceptable designs for a bicycle fork component.

1



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USLL CORP

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6. SR Suntour has manufactured 8000,000 forks using the same mechanical bond fit as that used for the SR Suntour Duo Truck 7006 model, and none have been the subject of safety recall or demonstrated a history of fork failure or fork crown/steerer tube joint separations.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on Mar 14 - 2003  
[date]

Naaji Jamaika  
[name]

COPY

IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF MARYLAND

WILLIAM LOCKWOOD, :  
 :  
 Plaintiff, :  
 :  
 vs. :  
 :  
 PACIFIC CYCLE, LLC and : Civil Action  
 TOYS "R" US-DELAWARE, INC., : No. WMN-02-CV-2068  
 :  
 Defendants/ :  
 Third-Party Plaintiffs, :  
 :  
 vs. :  
 :  
 SR SUNTOUR, INC. and :  
 SR SUNTOUR, USA, :  
 :  
 Third-Party Defendants. :  
 :  
 ----- :

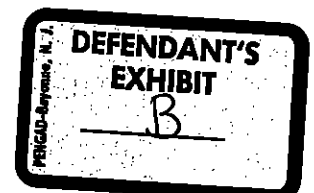
Deposition of ANDREW W. BLACKWOOD, Ph.D., taken  
on Wednesday, April 16, 2003, commencing at the hour  
of 9:00 a.m. at 100 East Pratt Street, 26th Floor,  
Baltimore, Maryland, before George W. Tudor, Notary  
Public.

APPEARANCES:

MICHAEL P. SMITH, ESQUIRE  
Salsbury Clements Bekman Marder & Adkins, LLC  
300 West Pratt Street, Suite 450  
Baltimore, Maryland 21201  
On behalf of the Plaintiff

EDWARD J. LOPATA, ESQUIRE  
Tydings and Rosenberg, LLP  
100 East Pratt Street, 26th Floor  
Baltimore, Maryland 21202  
On behalf of the Defendant/3rd-Party Plaintiff

Tudor Reporting Service  
Columbia, Maryland  
301.362.0825



1 place through the striations, and of course the force  
2 of the two metals against one another. Would that be  
3 fair to say?

4 A. Yes.

5 Q. And is it your opinion -- I'm just trying  
6 to understand it -- that movement back and forth  
7 between the two components loosens the fit?

8 A. I'm not sure you can put it in that  
9 sequence. The fit has to be loose and then the  
10 components can move relative to each other.

11 Q. What is it that loosened the fit?

12 A. I presume repeated impacts of some sort  
13 of -- whatever dinged the end of the handlebars.  
14 Whatever bent the back wheel. That sort of impact,  
15 but I don't have any direct knowledge. I don't think  
16 we can reconstruct exactly what happened to this  
17 bicycle.

18 Q. Is there anything that you can point me to  
19 in any of the deposition testimony -- for instance,  
20 of Mr. Lockwood or Mr. Wolcott or Ms. Saunders --  
21 that indicates any use of the bicycle that resulted

1 or could have caused the loosening of this  
2 interference fit?

3 A. Well, Mr. Wolcott certainly describes  
4 attempts to use the bicycle for stunts for which it  
5 was not designed.

6 Q. Whose bicycle was used for stunts for which  
7 it was not designed?

8 A. He describes Mr. Lockwood as attempting to  
9 perform stunts on this -- his bicycle.

10 Q. You understand him as saying that  
11 Mr. Lockwood attempted to perform stunts on  
12 Mr. Lockwood's bicycle or on Mr. Wolcott's bicycle?

13 A. I understand him to say that Mr. Lockwood  
14 attempted to do it with Mr. Lockwood's bicycle. I  
15 also understand him to say that Mr. Lockwood  
16 determined that the bicycle was not suitable for such  
17 things, and that there was some frustration involved,  
18 but that he couldn't do some of the things that he  
19 tried to do on the bicycle.

20 Q. Well, the record will be whatever the  
21 record is.

1           A.    I think we can agree on that.

2           Q.    We can sit here and argue about that  
3 forever.

4                   Anything else that you see in the record  
5 that would lead to this loosening of the interference  
6 fit?

7                   MR. LOPATA:  Mike, are you referring to  
8 something other than his visual inspection of the  
9 bicycle?  Does that include the record?

10                  MR. SMITH:  Anything in the record.

11                  MR. LOPATA:  Well, is his report considered  
12 to be in the record now?

13                  MR. SMITH:  We're talking about his report.  
14 I'm trying to find support for his report.

15                  MR. LOPATA:  But I just want to make it  
16 clear.  Are you also referring to his report that  
17 mentions the fact that he visually observed --

18                  MR. SMITH:  We have already gone through  
19 the visually part.  I understand that.

20                   (Recess, 10:35 - 11:00 a.m.)

21           Q.    We were talking about what caused the

1 looseness in the interference fit, and I believe you  
2 had pointed me to based on your observations and  
3 things in the record from Mr. Wolcott's deposition,  
4 and I had just finished asking you whether there is  
5 anything else you can point me to as to what sort of  
6 conduct caused the loosening of the interference fit.

7 A. I think that the evidence of the record,  
8 absent the bicycle, is a record of no abusive use of  
9 the bicycle. The evidence of the bicycle is that  
10 there is evidence of abuse in the bicycle itself. I  
11 can't point to anything in the record beyond the  
12 photographic documentation of some of that abuse that  
13 would support the argument that there was abuse.

14 Q. I believe I'm on the fourth page of your  
15 letter. It's the only part of the letter that  
16 doesn't have the header in it.

17 A. It should have a header.

18 Q. Mine didn't, but it may have been the way  
19 it came across in the Xeroxing. I got it by fax.  
20 Don't worry about it.

21 A. No, you're missing part of page four. Or

1 A. Yes, sir.

2 Q. And am I correct that it's a possibility  
3 that that indicates a warning of the progressive  
4 failure in process, but you can't tell because you  
5 don't know enough as to what this looseness was.

6 A. That's correct.

7 Q. Okay. Am I right that you have no  
8 independent knowledge as to how fork crowns and steer  
9 tubes are bonded in forks made by other  
10 manufacturers?

11 A. Beyond some anecdotal knowledge, no.

12 Q. And you have no opinion, at least no  
13 opinion that I see in your report, whether the design  
14 of the fork in this case, as you understand it, this  
15 thermal bonding, was a defective design or not a  
16 defective design. Would that be correct?

17 A. My opinion is that it is not a defective  
18 design.

19 Q. Do you know how soon prior to the date of  
20 the accident the joint between the steer tube and the  
21 fork crown had failed to the point where the steerer



IN THE UNITED STATES DISTRICT COURT  
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NORTHERN DIVISION

WILLIAM LOCKWOOD, : Civil Action No.: WMN-02-CV-2068  
Plaintiff :

vs. :

PACIFIC CYCLE, LLC :  
and TOYS "R" US- :  
DELAWARE, INC., :  
Third-Party :  
Plaintiffs :

vs. :

SR SUNTOUR, INC. and :  
SR SUNTOUR, USA, :  
Third-Party :  
Defendants :

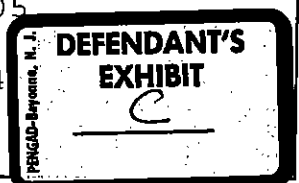
**ORIGINAL**

DEPOSITION OF ROBERT W. HINTON

Taken in the offices of Gallagher  
Reporting & Video, LLC, 33 South Seventh Street, Suite  
105, Allentown, Pennsylvania, on Friday, April 11,  
2003, commencing at 4:22 p.m., before Steven R. Mack,  
Registered Merit Reporter.

\* \* \*

GALLAGHER REPORTING & VIDEO, LLC.  
33 South Seventh Street, Suite 105  
Allentown, Pennsylvania 18101  
1-800-366-2980 -- (610) 439-0504



R. Hinton/Lopata

20

1 crown in this case, that would have made the bicycle  
2 heavier I take it?

3 A. Well, probably, yes. Because the density  
4 of steel is quite a bit higher than aluminum as you  
5 know.

6 Q. I believe you have a copy of Mr. Tanaka's  
7 affidavit.

8 A. Yes.

9 Q. Could you take a look at paragraph 5 of  
10 the affidavit?

11 MR. SMITH: Do you want a copy?

12 A. I have it in here. I must have rearranged  
13 it.

14 Q. First of all, Mr. Tanaka's affidavit  
15 indicates that he has experience in the production,  
16 does he not? That apparently you do not have, is that  
17 correct?

18 MR. SMITH: Objection.

19 MR. LOPATA: I don't have it in  
20 front of me. What does it say in the beginning?

21 MR. SMITH: Here. Do you want a  
22 copy?

23 MR. LOPATA: Yeah.

24 BY MR. LOPATA:

25 Q. Paragraph 3 says he as engineering -- "As

1 engineering development I am responsible for  
2 production of the various bicycle forks manufactured  
3 by SR Suntour." You just testified you don't have any  
4 such familiarity with the production of bicycle forks.  
5 Correct?

6 A. That's correct.

7 Q. Whether manufactured by SR Suntour or  
8 anybody else.

9 A. That's correct.

10 Q. Correct? And in paragraph 4, he indicates  
11 that the Duo Track 7006 model fork was designed and  
12 manufactured using a mechanical bond fit to secure the  
13 steel steerer tube to the aluminum alloy fork crown.  
14 That's your understanding as to what happened in this  
15 case?

16 A. Yes.

17 Q. Okay. I mean did you make a determination  
18 that the alloy used in the fork crown was in fact that  
19 metal that he indicates in there?

20 A. Well, just from visually looking at it, it  
21 looked like an aluminum alloy.

22 Q. But you didn't do any further testing  
23 other --

24 A. No, I did not.

25 Q. -- than eyeballing it? Okay. And then

1 paragraph Number 5, he talks about the industry  
2 standards there. It's -- my understanding is you  
3 don't have knowledge of the industry standards one way  
4 or the other to indicate whether or not Mr. Tanaka's  
5 statement is true or not true, is that correct?

6 A. Number 5?

7 Q. Yeah, Number 5.

8 A. He's saying "and it still is within the  
9 industry standard to design a fork using a mechanical  
10 bond fit to secure a steel steerer tube into a  
11 aluminum alloy fork crown. This is one of multiple  
12 acceptable designs for a bicycle fork component."

13 No, I don't have the background to  
14 say whether that's normally done or whether this is an  
15 unusual case.

16 Q. And Number 6, paragraph Number 6 of his  
17 affidavit. He's indicating that Suntours manufactured  
18 8,000,000 forks using the same mechanical bond fit as  
19 that used for the Duo Track 7006 model, and none have  
20 been the subject of safety recall or demonstrated a  
21 history of fork failure or fork crown/steerer tube  
22 separations.

23 Do you have any knowledge at all  
24 that would refute that statement he's making in that  
25 affidavit?

1 A. No, I do not.

2 Q. Are you aware of any other Duo Track 7006  
3 model becoming separated as you allege happened in  
4 this case?

5 A. No.

6 Q. Sir, with regard to your opinions in this  
7 case, if in fact you are correct that putting a steel  
8 steering tube into an aluminum fork crown would not  
9 make a good fit because of the various problems that  
10 you just indicated, wouldn't there have been numerous  
11 other failures?

12 A. That I don't know. I've not done any  
13 testing as to the actual strength of the fit, neither  
14 in torsion or tension. So I really don't have direct  
15 knowledge from testing the joint as to what the real  
16 joint strength is.

17 Q. Wouldn't you as a scientist want to have  
18 that information before you criticize this particular  
19 combination of steel and aluminum the way it was done?

20 A. One of the reasons I would not think a---  
21 number one, there's no way you can test the failed  
22 bicycle strength because that is loose to touch and to  
23 the hand. So that's certainly out of the question to  
24 reconstruct the conditions before the steerer tube  
25 came off its surface.

1 from -- from Jesse in the deposition. He described  
2 what he saw. I think he was --

3 Q. When he was doing the bunny hop, when  
4 Mr. Lockwood was doing the bunny hop he pulled up on  
5 the handlebars?

6 A. Yeah. I believe Jesse's deposition  
7 indicated, you know, it just came up. I mean that's a  
8 straight pull-out, from that description. Which  
9 shouldn't leave you with any major -- you know, unless  
10 this was loose to begin with.

11 Q. So what you're indicating, if I understand  
12 what you're saying, is that this joining of these two  
13 component parts had been loosened or disjointed before  
14 he actually pulled up on the bicycle on the day of the  
15 accident?

16 A. That would be my guess.

17 Q. We don't want you to guess.

18 A. That something would have broken -- that's  
19 only a guess. Yeah. It's not based on -- again you'd  
20 have to do a lot of testing in order to really come to  
21 the final conditions of whether or not normal use  
22 would break this joint apart.

23 Q. Or any abuse to the bicycle between the  
24 time he purchased the bicycle in May 7th -- or May  
25 1997 up until June '99?

R. Hinton/Lopata

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1 A. To me the bunny hop, which is a slight  
2 hop, only puts you up a small amount in height. Now,  
3 I actually made a calculation a long time ago on a  
4 bike pedal? And the man was 265 pounds, a policeman,  
5 in which the bike failed, and he was injured. And  
6 there he jumped from 2 feet. And I was able to  
7 calculate the actual force on the pedal because it was  
8 bent. And there I did hardness and destructive  
9 testing and so forth.

10 But 2 feet and a few inches for a  
11 bunny hop are far different in terms of the amount of  
12 force coming back down. It's probably a lot more  
13 force if you hit a curb because -- and again it  
14 depends now on your weight, speed, and other factors,  
15 compared to jumping over something.

16 Q. So your opinions on -- concerning this  
17 accident depends on the fact that the bike was not  
18 abused in any way that would have affected the bonding  
19 of the fork? Prior to the date of the accident, June  
20 9th, 1999. Correct?

21 A. Well, again I don't have the numbers to  
22 back up an opinion on that. But I think the -- one of  
23 two things could be occurring here. One is you have a  
24 joint that's right on the borderline of normal use  
25 breakage. That would be one possibility.

1           The other possibility is you have a  
2 joint much stronger than anything that you can do to  
3 it in normal use and you had an event somewhere along  
4 the way that may have broken that joint. And it could  
5 have been an event that nobody really noticed or knew  
6 about. And once the joint is broken, then normal use  
7 can really make that wear slightly and separation  
8 would occur.

9           Q.           So either one of those possibilities are  
10 equally possible?

11          A.           Yes. I don't have a firm opinion because  
12 I don't have the -- either the background or the  
13 measurements.

14          Q.           So it could be either way, you just can't  
15 tell?

16          A.           Yes.

17          Q.           So then as far as your summary is  
18 concerned on page 2, "The press-fit and/or the thermal  
19 interference fit between the thin-walled hollow  
20 steerer tube and the nonferrous fork crown of the  
21 bicycle in question is inadequate, unsafe;" you can't  
22 really say that, can you, because you don't have the  
23 facts, because you don't know what the strength was?

24          A.           Let's see. Where is that.

25          Q.           In summary.



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Plaintiff :

vs. :

PACIFIC CYCLE, LLC :  
and TOYS "R" US- :  
DELAWARE, INC., :  
Third-Party :  
Plaintiffs :

vs. :

SR SUNTOUR, INC. and :  
SR SUNTOUR, USA, :  
Third-Party :  
Defendants :

ORIGINAL

DEPOSITION OF JOHN D. SCHUBERT

Taken in the offices of Gallagher  
Reporting & Video, LLC, 33 South Seventh Street, Suite  
105, Allentown, Pennsylvania, on Friday, April 11,  
2003, commencing at 1:10 p.m., before Steven R. Mack,  
Registered Merit Reporter.

\* \* \*

GALLAGHER REPORTING & VIDEO, LLC.  
33 South Seventh Street, Suite 105  
Allentown, Pennsylvania 18101  
1-800-366-2980 -- (610) 439-0504

DEFENDANT'S  
EXHIBIT

D

1 And then when suspension forks came  
2 along, all of a sudden there was a rash of recalls  
3 which I would attribute to a severely shortened  
4 product development cycle. The bike companies have  
5 imposed on themselves a mad rush to keep redesigning  
6 things. And occasionally problems slip between the  
7 cracks, and the number of recalls is indicative of  
8 that.

9 Q. But you're not aware of any recalls  
10 dealing with the fork in question, the Duo 7006?

11 A. That's correct, I am not.

12 Q. And you don't -- you don't have any facts  
13 to refute the affidavit submitted in this case by  
14 Mr. Tanaka?

15 A. That's correct, I do not.

16 Q. So in paragraph 6 of his affidavit,  
17 Mr. Tanaka says, states under oath, "SR Suntour has  
18 manufactured 8,000,000 forks using the same mechanical  
19 bond fit as that used for the SR Suntour Duo Track  
20 7006 model, and none have been the subject of safety  
21 recall or demonstrated a history of fork failure or  
22 fork crown/steerer tube joint separations."

23 You don't have any information that  
24 would refute that, do you?

25 A. Well, they've got a history now, with this

1 one instance. But other than that, no, I don't.

2 Q. No. But at the time the bicycle was put  
3 in the stream of commerce back in May of 1997, based  
4 on the history as indicated by Mr. Tanaka, there isn't  
5 any way that he or you or anybody else could have  
6 foreseen that a separation such as you indicated  
7 occurred in this case could occur?

8 MR. SMITH: Well, objection.

9 Q. Is that correct?

10 MR. SMITH: Go ahead.

11 THE WITNESS: I'm sorry. What's the  
12 objection?

13 MR. SMITH: I just made an  
14 objection. It contains an assumption. But you don't  
15 have to worry about it.

16 THE WITNESS: I'm sorry. Can you  
17 read back the question?

18 (Thereupon the reporter read the  
19 previous question from the record.)

20 THE WITNESS: The answer to that  
21 would again depend on a more thorough review of that  
22 joining method. I'm not privy to Suntour's testing.  
23 And I'm certainly not privy to the company's field  
24 experience with this product.

25 But other than the -- than those

1 comments I've just raised, no, I don't have any such  
2 information.

3 BY MR. LOPATA:

4 Q. Now, you also indicate in the top of page  
5 2 "Alternative designs for steerer tube/fork crown  
6 junction with a far superior safety record" existed?  
7 Where are you getting your in -- what's the source of  
8 your information? We're going back to May of 1997.  
9 What information do you have that there were far  
10 superior safety records?

11 A. The fact that we don't see any failures,  
12 not even rare failures, in the standard brazed and  
13 welded configurations, or I've never seen any I should  
14 say.

15 Q. Are you finished?

16 A. Yeah.

17 Q. Oh, okay.

18 A. Sorry.

19 Q. In this case Mr. Tanaka indicates that  
20 they manufactured 8 million forks using the same

21 mechanical bond fit, and they never had a failure on  
22 a --

23 MR. SMITH: Objection. He doesn't  
24 say that.

25 MR. LOPATA: He does.

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CIVIL ACTION NO.: WMN-02-CV-2068

WILLIAM LOCKWOOD,  
Plaintiff,  
v.

PACIFIC CYCLE, LLC, AND TOYS "R"  
US-DELAWARE, INC.,  
Third-Party Plaintiffs,

v.

SR SUNTOUR, INC., AND SR SUNTOUR,  
USA,  
Third-Party Defendants.

**COPY**

DEPOSITION OF:  
JAMES M. GREEN

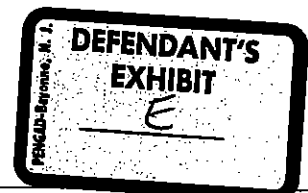
On Monday, April, 14, 2003, commencing at 1:05 p.m.,  
the deposition of JAMES M. GREEN was taken on behalf of the  
Defendant at the offices of Asheville Reporting Service, 66 N.  
Market Street, Asheville, North Carolina, and was attended by  
Counsel as follows:

APPEARANCES:

MICHAEL P. SMITH, ESQ.  
Salsbury, Clements, Bekman,  
Marder & Adkins, LLC  
300 W. Pratt Street, Suite 450  
Baltimore, Maryland 21201  
on behalf of the Plaintiff,

EDWARD J. LOPATA, ESQ.  
Tydings & Rosenberg, LLP  
100 East Pratt Street  
Baltimore, Maryland 21202  
on behalf of the Defendants.

REPORTED BY: Rebecca A. Geldres, CVR  
ASHEVILLE REPORTING SERVICE



1 the fork crown?

2 A Yes.

3 Q And you said that was a manufacturing defect?

4 A Correct.

5 Q What facts are you relying on to support your  
6 conclusion that this should have had a weld?

7 A What facts am I relying on?

8 Q Yes.

9 A Well, I'm not relying on facts as much as I am  
10 engineering standards, in that when you design  
11 anything, whether it's a front fork and a  
12 steer tube or a bridge, you should have -- you  
13 need to have redundancy built into the system  
14 so that you don't have failure. You can't  
15 rely on one -- one system or one design. You  
16 need to have -- you need to have redundancy  
17 built into the design to protect the public,  
18 regardless of what you're designing.

19 Q So it being your opinion in your letter here,  
20 when you indicate that there should have been  
21 a weld in place and you didn't see any, are  
22 you aware of any bicycle standards that would  
23 require a mechanical fit to be welded?

24 A Oh, there are none, as I said earlier. I'm  
25 speaking as a -- as an engineer basically

1 has never had a recall on this front fork?

2 A Well, I don't know if they have or haven't.

3 If you're telling me that they haven't, I'll  
4 assume they haven't.

5 Q But you don't have any knowledge whether they  
6 have or have not?

7 A I don't have any knowledge that they have or  
8 have not had a recall. I mean, if you're  
9 telling me that they haven't, I'll assume  
10 you're an honorable man; I'll assume they  
11 haven't.

12 Q Well, I have an affidavit here from Mr.  
13 Tanaka, which I assume you've seen; haven't  
14 you?

15 A Yes.

16 Q And he indicates that SR Suntour has  
17 manufactured like eight million of these forks  
18 using the same mechanical bond fit, and it has  
19 not been the subject of a safety recall nor  
20 has it demonstrated a history of fork failure  
21 or fork crown-steer tube joint separations.  
22 Do you have any knowledge, any facts from  
23 anything that would refute Mr. Tanaka's, as  
24 far as Paragraph No. 6 is concerned in his  
25 affidavit?

1 A Okay. For the record here, is it Defendant's  
2 Exhibit 7 in the record here today?

3 BY MR. LOPATA:

4 No, it was ---

5 BY MR. SMITH:

6 I thought No. 7 was Pacific Cycle's Opposition  
7 to Motion for Summary Judgment.

8 BY MR. LOPATA:

9 Everybody knows what it is, I guess.

10 BY THE DEPONENT:

11 Well, I don't want to -- I don't want to  
12 be ---

13 BY MR. LOPATA:

14 All right. Then we'll make that Exhibit 7.  
15 How's that?

16 BY THE DEPONENT:

17 All right. Can we get a stamp?

18 BY MR. LOPATA:

19 Yes, we'll put Exhibit 7.

20 (DEFENDANT'S DEPOSITION EXHIBIT NO. 7 MARKED)

21 BY THE DEPONENT:

22 Because when I read the depo, I'll never find  
23 an exhibit to go with it. Okay. I know your  
24 question. Okay. My answer to you, looking at  
25 Defendant's Exhibit 7, and it was number ---



DIRECT EXAMINATION RESUMED BY MR. LOPATA:

Q Paragraph 6.

A Paragraph 6, thank you, of that exhibit. I don't believe him. I don't believe that if you have eight million forks using the bond fit, mechanical bond fit that we're looking at in this project, that you've never had a failure. I think this is an unsafe design. It's an unsafe fit. I don't believe Mr. Tanaka. if there has been eight million of these forks out there and none of them have failed, I would be astounded, as an engineer sitting here today. So I don't think what he's saying is correct. He may not personally be aware of a failure, but I guarantee you, as an engineer, as a professional engineer that's been dealing in these issues for years, if you have eight million of these things out there with a mechanical bond fit, no redundancy, and that there hasn't been a failure, I can't believe it.

Q I assume that you will admit that you could be wrong about things?

A Well, nobody's perfect. Nobody's perfect.

Q And so my question to you, do you have any

1 information, any facts, other than a belief  
2 that you may hold, to refute Paragraph 6 of  
3 the affidavit?

4 A No.

5 Q Now with regard to, I believe it's Paragraph 5  
6 -- let me see it for just a second.

7 A Make sure you're right because ---

8 Q I'm just relying on his affidavit.

9 A No, I mean on the defendant's exhibit because  
10 -- the number. I'm pressuring about that  
11 because I can never follow stuff, you know,  
12 two weeks from now, if I can't get back to the  
13 exhibit number.

14 Q Okay. In dealing with Defendant's Exhibit No.  
15 7, which is the affidavit in question, with  
16 regard to Paragraphs 4 and 5, this says that  
17 as far as manufacturing these component parts,  
18 it was within the industry standards to have a  
19 mechanical fit, such as they used on Duo Track  
20 7006.

21 A I don't think it's within industry standards  
22 to have a mechanical bond such as we're  
23 dealing with here, without something to back  
24 it up like a weld or some type of glue/epoxy,  
25 at a minimum.

1 without an epoxy, without a weld.

2 A And he's saying that's an industry standard?

3 Q And he's saying that's an industry standard.

4 That's what I was asking about, whether or not  
5 you have any experience in the industry. Are  
6 you involved and have you ever been involved  
7 in the manufacturing of these types of  
8 components?

9 A No. I don't -- I'm not involved in the  
10 manufacturing end. I get hired as a  
11 consultant a lot, but I don't -- or a  
12 consultant engineer, but I'm not involved as a  
13 manufacturer. I'm not a manufacturer.

14 Q What about designing crown forks and steering  
15 tubes going into crown forks?

16 A Have I ever designed any? I'm sure that I  
17 have. I can't -- I can't sit here today and  
18 tell you specifically a design that I could  
19 hand you, you know, when you get back to your  
20 office. I've been involved in these issues  
21 for a lot of years. In terms of design, the  
22 integrity of front forks has been a concern of  
23 mine for a number of years and I've done a lot  
24 of testing in that area and I'll be glad to  
25 share that with you today. Have I sat down

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15 April 2003

Mr. Edward J. Lopata, Esq.  
Tydings & Rosenberg LLP  
100 East Pratt Street  
Baltimore, MD 21202

Re: Lockwood v. Pacific Cycle, et al.

Dear Mr. Lopata:

This letter will constitute my preliminary report in this matter. At your request I have examined the bicycle at issue and reviewed documents including expert reports, expert credentials, bicycle owner's manuals, deposition transcripts, pleadings, photographs of the bicycle and a bicycle repair invoice.

Background:

According to the available materials, the bicycle at issue was produced by Pacific Cycle, purchased at Toys R Us in 1997, repaired in 1998 and involved in an accident in which William Lockwood was injured in 1999. The alleged cause of the accident was the separation of the steering tube from the fork crown while Mr. Lockwood was executing a "bunny hop" maneuver over a manhole cover.



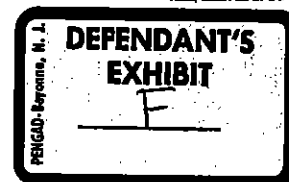
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Examination:

The bicycle was examined visually under room lighting conditions in Baltimore, MD on 10 April 2003. The appearance of the bicycle is consistent with the photographs which have been obtained by others. The bicycle has been disassembled, and it is obviously not in the same condition as it was immediately following the accident. In particular, the steerer tube is loose in the frame, suggesting that someone has removed the steerer tube for inspection and not retightened the connection. The record indicates that the bicycle has been shipped at least once in the box in which it was being stored at the time of the examination.

Several areas of the bicycle show evidence of very heavy use and repeated contact with pavement or other hard, abrasive materials. The ends of the handlebars are deformed in a manner which is consistent with many such impacts. Some components, such as the seat and the rear wheel, appear to be relatively recent replacements. The fork crown has separated from the steerer tube. The steerer tube has striations in the joint area, and there is very little evidence of deformation on the steerer tube; there is one area which may represent some deformation during final separation and/or impact with a hard surface following the final separation. There are indications that the bicycle saw considerable use with the rear wheel either bent or misaligned so that it rubbed on the frame.

The joint area of the fork crown exhibits two different appearances. In the lower portion, there are essentially undisturbed striations which would appear to correspond with the striations on the steerer tube. On the upper portion, the metal is smeared, consistent with repeated motion of the fork crown relative to the steerer tube. This damage is not consistent with a single, final separation event; rather, it is consistent with continued looseness of the joint between the steerer tube and the fork crown over a long period of use.

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Tydings & Rosenberg LLP

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Analysis:

The record indicates that the bicycle at issue was designed with three major objectives in mind:

1. To appeal to the customer as a "mountain bike" type bicycle.
2. To sell at Toys R Us for approximately \$150.00.
3. To meet all applicable regulations.

The record also indicates that the bicycle at issue was not designed for aggressive off-road riding and that it was not designed for stunt riding. The record is not clear whether the bicycle at issue was designed to "bunny hop" over a manhole cover when ridden by a person weighing 180 pounds.

The design process which was used included several parties: Toys R Us set the overall objectives; Pacific Cycle turned those objectives into design specifics; China Bicycle Company designed a bicycle to meet all of the applicable objectives, selecting from among off-the-shelf components manufactured by several companies, including SR Suntour. The crown fork assembly which was selected by Pacific Cycle was produced by SR Suntour.

The design used by SR Suntour for this particular crown fork assembly uses a steel steerer tube and a nonferrous fork crown; these components are joined together by a process described as thermal bonding. The record does not indicate precisely how this thermal bonding is accomplished in practice; it is assumed that the aluminum is heated and/or that the steel is cooled, but details are not available at this time. The resistance to relative motion between the steerer tube and the fork crown is aided by the presence of striations on the steerer tube which effectively lock the steerer tube into place in the fork crown. The condition of the joint portion of the fork crown is consistent with loosening of the joint and repeated rotary motion of the steerer tube in the fork crown. By all indications, the separation of the steerer tube and the fork crown was a progressive event and not a sudden failure.

Mr. Edward J. Lopata, Esq.  
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The record indicates that Mr. Lockwood noticed a looseness somewhere in the steering mechanism of the bicycle during 1998, the bicycle was taken to a bicycle mechanic and repairs were made to the bicycle at that time. The record does not indicate whether this looseness was the observed looseness of the steerer tube in the frame, a warning of the progressive failure in process or the often experienced looseness of the joint between the steerer tube and the handlebars.

It has been suggested that the integrity of the joint between the steerer tube and the fork crown would be improved by the use of welding and/or adhesive bonding. In practice the welding of steel to nonferrous metals is difficult to accomplish. Adhesive bonding might have added a small amount to the mechanical strength provided by the striations and the thermal bonding process, but at the time of the accident the joint had clearly failed to the point where the steerer tube was able to move within the fork crown; even in this failed condition, the bicycle continued to function until Mr. Lockwood's "bunny hop" maneuver.

The record indicates that the design of the crown fork assembly probably met the established objectives of price, appearance and performance at the time that the crown fork assembly left the control of SR Suntour and, indeed, the control of China Bicycle Company, Pacific Cycle and/or Toys R Us. After the bicycle left the control of these parties, it was subjected to considerable abuse, and as a result of that abuse, the connection between the steerer tube and the fork crown was separated, ultimately leading to the accident.

Mr. Edward J. Lopata, Esq.  
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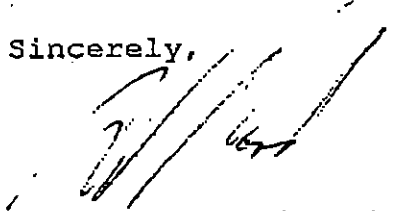
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Conclusions:

1. The crown fork assembly was designed and manufactured to meet the established objectives for the bicycle of price, appearance and performance.
2. The crown fork assembly failed as the result of abuse of the bicycle.
3. Despite the separation of the joint of the crown fork assembly, the joint continued to provide support and steering control of the bicycle until the "bunny hop" maneuver was attempted.

Obviously, as discovery continues in this matter, it may be necessary to modify or expand on these conclusions. Please let us know if we may be of further assistance with this or any other materials problem.

Sincerely,



Andrew W. Blackwood, Ph.D.  
Vice President, Technical

AWB:fo

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